

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A hand-held, electronically controlled injection device for injecting preset doses of a liquid medication, comprising

a housing adapted to receive a medication container containing the liquid medication and which has a contact surface adapted to contact a patient's skin, wherein said contact surface comprises a through opening adapted to receive a needle assembly comprising a needle;

electromechanical actuator means configured to move said medication container within said housing to and from said contact surface;

retaining means configured to selectively lock said needle assembly at a locked position at said through opening,

wherein said electromechanical actuator means and said retaining means are configured to allow automatic connection of said needle to said medication container by moving said medication container towards said contact surface from a first operating position withdrawn inside said housing to a second operating position while said retaining means maintains said needle assembly at said locked position.

2. (Cancelled)

3. (Currently Amended) A device as claimed in Claim 1, comprising presence sensor means configured to generate a presence signal to activate said ~~first~~electromechanical actuator means upon said needle assembly engaging said opening.

4. (Previously Presented) A device as claimed in Claim 1, wherein said retaining means

comprise at least one locking lever movable between a lock configuration, in which a respective work portion projects inside said opening to interact with said needle assembly, and a release configuration, in which said work portion is located outside said opening.

5. (Previously Presented) A device as claimed in Claim 4, wherein said locking lever is loaded elastically into the lock configuration; and a push means is configured to set said locking lever to said release configuration at least in said first operating position of said medication container.

6. (Previously Presented) A device as claimed in Claim 5, wherein said push means comprise cam means interposed between said locking lever and a support configured to support said medication container and which is movable to and from said contact surface.

7. (Previously Presented) A device as claimed in Claim 1, comprising removing means configured to remove said needle from said medication container; said removing means comprising stop means configured to be selectively activated in a third operating position of said medication container, close to said second operating position, to lock said needle and disconnect said needle from said medication container as said medication container moves into said first operating position.

8. (Previously Presented) A device as claimed in Claim 7, wherein said third operating position is located on the opposite side of said second operating position with respect to said first operating position in a travelling direction of said medication container.

9. (Previously Presented) A device as claimed in Claim 7, wherein said retaining means comprise at least one locking lever movable between a lock configuration, in which a respective work portion projects inside said opening to interact with said needle assembly, and a release configuration, in which said work portion is located outside said opening, wherein said needle assembly comprises a needle support supporting said needle in projecting manner and connectable to one end of said medication container, and wherein, in said third operating position of said medication container, said work portion of said locking lever is interposable between said medication container and said needle support to define said stop means.

10. (Previously Presented) A device as claimed in Claim 1, wherein said retaining means comprise at least one releasable retaining member configured to be actuated by said needle assembly upon insertion of said needle assembly into said opening, said releasable retaining member(s) configured to retain said needle assembly at least during said displacement of said medication container from said first to said second operating position.

11. (Previously Presented) A device as claimed in Claim 34, wherein said retaining means comprise at least one releasable retaining member configured to be actuated by said needle housing upon insertion of said needle housing into said opening, said releasable retaining member configured to retain said needle housing at least during said displacement of said medication container from said first to said second operating position, and wherein said retaining means further comprise an abutment surface configured to limit insertion of said needle housing into said opening and to retain said needle housing during said reverse displacement of said medication container from said second to said first operating position.

12. (Previously Presented) A device as claimed in Claim 11, comprising sensor means configured to sense actuation of said releasable retaining member.

13. (Previously Presented) A device as claimed in Claim 12, comprising means for reversing displacement of said medication container immediately after said sensor means have detected a disengagement of said needle housing from said releasable retaining member(s) during said displacement of said medication container from said first to said second operating position.

14. (Previously Presented) A device as claimed in Claim 10, comprising means for removing said needle from said medication container, said removing means comprising stop means which may be activated in said second operating position of said medication container to retain said needle and disconnect said needle from said medication container as said medication container is moved from said second to said first operating position.

15. (Previously Presented) A device as claimed in Claim 1, wherein said needle assembly comprises a needle support configured to support said needle, and wherein at least one of said needle support and an end of a medication container unit, comprising said medication container and a holder holding said medication container located inside said housing, is provided with at least one elastic flange for connection of said needle support to said end of said medication container unit.

16. (Previously Presented) A device as claimed in Claim 1, comprising first sensor

means configured to detect proper connection of said needle to said medication container.

17. (Previously Presented) A device as claimed in Claim 16, wherein said first sensor means comprise optical transmitter means and first optical receiver means arranged so that, when no needle is properly connected to said medication container, a first optical ray transmitted by said transmitter means passes near an end of a medication container unit, comprising said medication container and a holder holding said medication container inside said housing, to reach said first receiver means, and when said needle is properly connected to said medication container, said first optical ray is interrupted by a needle support supporting said needle.

18. (Previously Presented) A device as claimed in Claim 17, wherein said end of said medication container unit is truncated to let said first optical ray pass when no needle is properly connected to said medication container.

19. (Previously Presented) A device as claimed in Claim 16, comprising second sensor means for detecting partial connection of said needle to said medication container.

20. (Previously Presented) A device as claimed in Claim 17, comprising a second sensor means configured to detect partial connection of said needle to said medication container, and wherein said second sensor means comprise said optical transmitter means and second optical receiver means arranged so that, when no needle is connected to said medication container, a second optical ray transmitted by said transmitter means passes near said end of said medication container unit to reach said second receiver means, and in a configuration

where said needle is partly connected to said medication container, said second optical ray is interrupted by said needle support while said first optical ray still reaches said first receiver means.

21. (Previously Presented) A device as claimed in Claim 16, wherein an end of a medication container unit, comprising said medication container and a holder configured to hold said medication container inside said housing, is provided with at least one elastic flange for connection of a needle support supporting said needle to said end of said medication container unit, and wherein said first sensor means comprise optical transmitter means and optical receiver means arranged so that, when said needle is properly connected to said medication container, a reflective portion of one of said elastic flange(s) reflects an optical ray transmitted by said transmitter means towards said receiver means, and when no needle is properly connected to said medication container, said reflective portion reflects said optical ray in a direction not corresponding to said receiver means.

22. (Currently Amended) A device as claimed in Claim 1, comprising second actuator means configured to be selectively activated ~~[[s]]~~ to force the liquid medication contained in said medication container through a patient's skin.

23. (Currently Amended) A device as claimed in Claim 22, wherein said second actuator means comprise an actuator assembly and a push member configured to be driven by said actuator assembly and which can be moved axially from a retracted position, located outside said medication container, to enter said medication container and push the liquid medication out of said medication container through said needle, and then returned to its retracted

position, said device further comprising a door which, in its open position, is configured to permit insertion or removal of said medication container into or from said housing, a door opening mechanism configured to open or close said door and a lock mechanism configured to lock at least part of said door opening mechanism, to prevent opening of said door, when said push member is located inside said medication container and configured to unlock said door opening mechanism when said push member is in [[a]] said retracted position.

24. (Previously Presented) A device as claimed in Claim 23, wherein said lock mechanism is designed to lock a door opening button of said door opening mechanism when said push member is inside said medication container.

25. (Previously Presented) A device as claimed in Claim 24, wherein said lock mechanism comprises a first lever configured to lock said door opening button when in a rest position, said first lever configured to be actuated by said push member during retraction of this latter to unlock said door opening button.

26. (Previously Presented) A device as claimed in Claim 25, wherein said lock mechanism further comprises a part movable in the direction of displacement of said push member and which, in a rest position, is out of contact with said first lever and, during retraction of said push member, is pushed by an end portion of said push member to come into contact with and actuate said first lever.

27. (Previously Presented) A device as claimed in Claim 23, wherein said door opening mechanism comprises a door opening button movable in the direction of displacement of said

push member, a second lever actuated by said door opening button, a locking member movable in said direction, actuated by said second lever and having a first flange, and a medication container holder configured to hold said medication container inside said housing, said medication container holder having a second flange designed to cooperate with said first flange and being pivotable with said door from a closed to an open position of said door when said second flange is released by said first flange.

28. (Currently Amended) A device as claimed in Claim 22, comprising injection control button means, said button means configured to successively activate said ~~first~~ electromechanical actuator means to move the assembly defined by the medication container and needle from the first to the second operating position so that the needle penetrates the patient's skin, and said second actuator means to deliver through the patient's skin a preset dose of liquid medication contained in said medication container.

29. (Previously Presented) A device as claimed in Claim 28, comprising skin sensor means configured to generate a consent signal to activate said button means upon interaction between said contact surface and the patient's skin.

30. (Previously Presented) A device as claimed in Claim 28, comprising selecting means configured to select a speed at which said medication container moves towards said contact surface at least as said needle penetrates the patient's skin, said selecting means configured to set a dose of liquid medication to be injected into the patient.

31.-32.(Cancelled)

33. (Previously Presented) A device as claimed in Claim 1, comprising said needle assembly.

34. (Previously Presented) A device as claimed in Claim 1, wherein said needle assembly comprises at least one needle housing fitted to said needle, and wherein said retaining means is adapted to lock said needle housing both during displacement of said medication container from said first to said second operating position and during a reverse displacement of said medication container from said second to said first operating position to permit automatic withdrawal of said needle from said needle housing.